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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,172	04/16/2004	Terrence Martineau	ALC 3130	8264

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EXAMINER	
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ART UNIT	PAPER NUMBER
2173	

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12/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/825,172	MARTINEAU ET AL.	
	Examiner	Art Unit	
	Alvin H. Tan	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16 and 18-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-16 and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 September 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. Claims 1, 3-16, and 18-20 have been examined and rejected. This Office action is responsive to the amendment filed on 9/20/07, which has been entered in the above identified application.

Drawings

2. The replacement sheet for Figure 1 submitted on 9/20/07 has been considered and is entered into the application. The objections to the drawings have been withdrawn.

Claim Rejections - 35 USC § 112

3. The corrections to claims 5 and 6-12 have been approved, and the objections to the claims under 35 USC 112, second paragraph, are withdrawn.

Claim Rejections - 35 USC § 101

4. The rejections of claims 6-12 under 35 USC 101 have been reconsidered and the rejections have been withdrawn.

5. The corrections to claims 16-20 have been approved, and the rejections to the claims under 35 USC 101 have been withdrawn.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 3-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain et al (U.S. Patent No. 6,225,999 B1) and Arquie et al (U.S. Patent No. 6,836,275 B1).

Claims 1, 3-5 (Method)

Claims 6-12 (Modified GUI)

Claims 16, 18-20 (Network Map)

7-1. Regarding claims 1, 6, and 16, Jain teaches the claim comprising collecting data for all objects to be displayed on said map in response to a request transmitted over a GUI, by disclosing a graphical user interface which permits a network manager to select a limited number of network components for display in a topological map, along with pertinent information relating thereto, while removing the display of undesirable or unnecessary data *[column 2, lines 42-47]*. Information regarding the network components is first gathered as described in *[column 4, line 17 to column 5, line 3]*.

Jain teaches bundling all connections between a network device and a group of network devices outside said map into an outside link, grouping all outside links for said network device into a multiple link connector (MLC) object and displaying said map, by disclosing that all components which are not illustrated in a created map are identified by an indicator with a star as shown in *[figure 4; column 6, lines 29-44]*.

As per claim 6, Jain teaches a map data collector, by disclosing that a management application program or process may issue a request for information from various nodes on a network *[column 4, lines 35-38]*. Jain teaches a multiple link connector (MLC) generator, by disclosing that a network manager provides the ability to customize information displayed on the monitor at the management station. The network manager builds a repository of the network components and their logical connections in order to build the configured display *[column 5, line 45 to column 6, line 12]*. Jain teaches maintaining a connections list L(n) for each said outside link, by disclosing that information regarding the unillustrated components are stored in a repository *[column 6, lines 29-44]*. Jain teaches a list organizer, by disclosing that the network manager groups outside links for a selected network device as shown in *[figure 6]*.

Jain does not expressly teach associating said MLC object with an interactive connector icon, displaying said map showing said interactive connector icon attached to said network device, and selecting said interactive connector icon for displaying a pop-up window showing a multiple link connector (MLC) list where each outside link object is associated with a respective group object. Arquie teaches a method for displaying

multiple connections between nodes in a network topology display in a computer user interface *[column 1, lines 22-25]*. Symbols are used to indicate multiple connections *[column 2, lines 7-20]*. This provides a simplified way to clearly and effectively identify multiple connections to a user. Since Jain teaches displaying network components in a topological map and indicating the number of connections to components outside the map, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a symbol representing the number of connections, as taught by Arquie. This would provide a simplified way to clearly and effectively identify multiple connections to a user.

Additionally, Arquie teaches that details of the multiple connections are displayed upon user selection of a symbol *[Arquie, column 2, lines 21-27]*. Each outside link is associated with the node they are connected with on the map. When a symbol is selected, it is highlighted to indicate that the displayed information corresponds to the highlighted connection *[Arquie, column 3, line 44 to column 4, line 9]*. This provides a more user intuitive approach to displaying information about the multiple connections. Since Jain teaches a pop-up menu that allows users to obtain information about peers of the node *[Jain, column 7, line 62 to column 8, line 16; figure 6]*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the pop-up menu of Jain containing the options related to the peers of the node, in response to selection of the symbol representing the multiple connections as taught by Arquie. This would provide a more user intuitive approach of obtaining additional information about the connections represented by the symbol.

7-2. Regarding claims 3 and 18, Jain and Arquie teach the claim wherein said multiple link connector list displays in each row an interactive outside link widget associated with a respective interactive group identification widget, by disclosing the pop-up menu containing commands relating to the peers of the node. The two commands "Show Adj. Peers" and "Peer Group View" are both group identification widgets associated with the commands on the menu *[Jain, figure 6]*.

7-3. Regarding claims 4 and 19, Jain and Arquie teach the claim further comprising selecting said interactive outside link widget on said multiple link connector list to display a connections list L(n) identifying all connections bundled within said outside link object, by disclosing the commands "Peer Information" and "Peer Statistics" on the menu *[Jain, figure 6]*.

7-4. Regarding claims 5 and 20, Jain and Arquie teach the claim further comprising selecting said respective interactive group identification widget on said multiple link connector list to display a sub-map of said network showing all network devices in said group, by disclosing the commands "Show Adj. Peers" and "Peer Group View" on the menu *[Jain, figure 6; column 8, lines 3-16]*.

7-5. Regarding claim 7, Jain and Arquie teach the claim further comprising a list organizer for generating a multiple link connector (MLC) list showing an association

between outside link and a respective group of outside network devices, by disclosing a pop-up menu that allows users to obtain information about the peers of the node *[Jain, column 7, line 62 to column 8, line 16; figure 6]*.

7-6. Regarding claim 8, Jain and Arquie teach the claim wherein each outside link is displayed using an interactive outside link widget, by disclosing symbols representing multiple connections *[Arquie, column 2, lines 7-20]* which may display details of the multiple connection upon user selection of the symbol *[Arquie, column 2, lines 21-27]*.

7-7. Regarding claim 9, Jain and Arquie teach the claim wherein each group of outside network devices is displayed using an interactive group identification widget, by disclosing commands on a pop-up menu relating to the peers of the node. The command "Show Adj. Peers" displays all components which are directly connected to the selected node *[Jain, column 8, lines 3-16]*.

7-8. Regarding claim 10, Jain and Arquie teach the claim wherein said list organizer displays said MLC list in response to selection of said interactive outside link widget, by disclosing a pop-up menu that allows users to obtain information about the peers of the node *[Jain, column 7, line 62 to column 8, line 16; figure 6]*.

7-9. Regarding claim 11, Jain and Arquie teach the claim wherein said list organizer displays a sub-map of said group in response to selection of said interactive group

identification widget, by disclosing the commands "Show Adj. Peers" and "Peer Group View" on the menu *[Jain, figure 6; column 8, lines 3-16]*.

7-10. Regarding claim 12, Jain and Arquie teach the claim wherein said interactive multiple link connector icon is not generated for a single connection, by disclosing that symbols are only used for multiple connections *[Arquie, column 2, lines 7-20]*.

Claims 13-15

7-11. Regarding claim 13, Jain teaches the claim comprising obtaining a multiple link connector list and displaying an interactive outside link widget associated with an interactive group identification widget for each group of outside network devices connected to said network device, by disclosing a graphical user interface which permits a network manager to select a limited number of network components for display in a topological map, along with pertinent information relating thereto, while removing the display of undesirable or unnecessary data *[column 2, lines 42-47]*. A pop-up menu allows users to obtain information about peers of a selected node *[Jain, column 7, line 62 to column 8, line 16; figure 6]*. The pop-up menu contains commands relating to the peers of the node. The two commands "Show Adj. Peers" and "Peer Group View" are both group identification widgets associated with the commands on the menu *[Jain, figure 6]*.

Jain does not expressly teach whenever a network device is connected to more than one outside network device of a group of outside network devices external to a

map, displaying an outside link connecting said network device with said group using an interactive multiple link connector icon and selecting said multiple link icon on said map to obtain the multiple link connector list. Arquie teaches a method for displaying multiple connections between nodes in a network topology display in a computer user interface *[column 1, lines 22-25]*. Symbols are used to indicate multiple connections *[column 2, lines 7-20]*. This provides a simplified way to clearly and effectively identify multiple connections to a user. Since Jain teaches displaying network components in a topological map and indicating the number of connections to components outside the map, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a symbol representing the number of connections, as taught by Arquie. This would provide a simplified way to clearly and effectively identify multiple connections to a user. Details of the multiple connection are displayed upon user selection of the symbol *[Arquie, column 2, lines 21-27]*. Each outside link is associated with the node they are connected with on the map.

7-12. Regarding claim 14, Jain and Arquie teach the claim further comprising selecting said interactive outside link widget for said outside link to obtain a list L(n) with all connections between said network device and said group, by disclosing the commands "Peer Information" and "Peer Statistics" on the menu *[Jain, figure 6]*.

7-13. Regarding claim 15, Jain and Arquie teach the claim further comprising selecting said interactive group identification widget on said multiple link connector list to display

a sub-map of all network devices in said group, by disclosing the commands "Show Adj. Peers" and "Peer Group View" on the menu *[Jain, figure 6; column 8, lines 3-16]*.

Response to Arguments

8. The Examiner acknowledges the Applicant's amendments to claims 1, 3, 5-7, 13, 16, and 18-20 and the cancellation of claims 2 and 17. Regarding claim 1, the Applicant alleges that Jain et al (U.S. Patent No. 6,225,999 B1), as described in the previous Office action, does not explicitly teach, "an interactive connector icon", Contrary to Applicant's arguments, the combination of Jain and Arquie et al (U.S. Patent No. 6,836,275 B1) teach the claimed limitation. Arquie teaches a method for displaying multiple connections between nodes in a network topology display in a computer user interface *[column 1, lines 22-25]*. Symbols are used to indicate multiple connections *[column 2, lines 7-20]*. This provides a simplified way to clearly and effectively identify multiple connections to a user. Since Jain teaches displaying network components in a topological map and indicating the number of connections to components outside the map, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a symbol representing the number of connections, as taught by Arquie. This would provide a simplified way to clearly and effectively identify multiple connections to a user. Thus, the symbol would represent the interactive connector icon. Additionally, Arquie teaches that details of the multiple connections are displayed upon user selection of the symbol *[Arquie, column 2, lines 21-27]*. Each outside link is associated with the node they are connected with on the map. When a

symbol is selected, it is highlighted to indicate that the displayed information corresponds to the highlighted connection *[Arquie, column 3, line 44 to column 4, line 9]*. This provides a more user intuitive approach to displaying information about the multiple connections. Since Jain teaches a pop-up menu that allows users to obtain information about peers of the node *[Jain, column 7, line 62 to column 8, line 16; figure 6]*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the pop-up menu of Jain containing the options related to the peers of the node, in response to selection of the symbol representing the multiple connections as taught by Arquie. This would provide a more user intuitive approach of obtaining additional information about the connections represented by the symbol.

Regarding claim 6, the Applicant alleges that Jain and Arquie, as described in the previous Office action, do not explicitly teach, "a system for providing a... map data collector... a multiple link connector (MLC) generator... and a list organizer", as has been amended to the claim. Contrary to Applicant's arguments Jain teaches a map data collector, by disclosing that a management application program or process may issue a request for information from various nodes on a network *[Jain, column 4, lines 35-38]*. Jain teaches a multiple link connector (MLC) generator, by disclosing that a network manager provides the ability to customize information displayed on the monitor at the management station. The network manager builds a repository of the network components and their logical connections in order to build the configured display *[Jain, column 5, line 45 to column 6, line 12]*. Jain teaches a list organizer, by disclosing that

the network manager groups outside links for a selected network device as shown in *[Jain, column 6, lines 24-67; figure 6]*.

Regarding claim 7, the Applicant alleges that Jain, as described in the previous Office action, does not explicitly teach, "a list organizer", as has been amended to the claim. Contrary to Applicant's arguments, Jain teaches a list organizer, by disclosing that the network manager groups outside links for a selected network device as shown in *[Jain, column 6, lines 24-67; figure 6]*.

Regarding claims 13 and 16, the Applicant alleges that Jain, as described in the previous Office action, does not explicitly teach, "a multiple link connector icon". Contrary to Applicant's arguments, the combination of Jain and Arquie teach the claimed limitation. Arquie teaches a method for displaying multiple connections between nodes in a network topology display in a computer user interface *[column 1, lines 22-25]*. Symbols are used to indicate multiple connections *[column 2, lines 7-20]*. This provides a simplified way to clearly and effectively identify multiple connections to a user. Since Jain teaches displaying network components in a topological map and indicating the number of connections to components outside the map, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a symbol representing the number of connections, as taught by Arquie. This would provide a simplified way to clearly and effectively identify multiple connections to a user. Thus, the symbol would represent the multiple link connector icon. Additionally, Arquie teaches that details of the multiple connections are displayed upon user selection of the symbol *[Arquie, column 2, lines 21-27]*. Each outside link is associated

with the node they are connected with on the map. When a symbol is selected, it is highlighted to indicate that the displayed information corresponds to the highlighted connection *[Arquie, column 3, line 44 to column 4, line 9]*. This provides a more user intuitive approach to displaying information about the multiple connections. Since Jain teaches a pop-up menu that allows users to obtain information about peers of the node *[Jain, column 7, line 62 to column 8, line 16; figure 6]*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the pop-up menu of Jain containing the options related to the peers of the node, in response to selection of the symbol representing the multiple connections as taught by Arquie. This would provide a more user intuitive approach of obtaining additional information about the connections represented by the symbol.

Examiner notes that part of Applicant's arguments appear to be missing, as the final paragraph on page 11 of Applicant's remarks contains a sentence that does not appear to continue on page 12.

Dependent claims 3-5, 7-12, 14, 15, and 18-20 recite all the limitations of the independent claims, and thus, are dependent upon the remarks set forth regarding independent claims 1, 6, 13, and 16. As discussed above, Jain and Arquie are considered to teach claims 1, 6, 13, and 16, and consequently, claims 3-5, 7-12, 14, 15, and 18-20 are rejected.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin H. Tan whose telephone number is 571-272-8595. The examiner can normally be reached on Mon-Fri 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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